AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
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2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (*If applicable*)
PR-CI-04-10961/0001	17 SEP 2004	PR-CI-04-10961	

6. ISSUED BY	CODE	7. ADMINISTERED BY (*If other than item 6*)	CODE
Environmental Protection Agency Cincinnati Procurement Operations Division Cincinnati, OH 45268		Not Applicable.	

8. NAME AND ADDRESS OF CONTRACTOR (*No., street, county, State and ZIP Code*)	(✓)	9A. AMENDMENT OF SOLICITATION NO.
To All Offerors/Bidders.		PR-CI-04-10961
	✓	9B. DATED (*SEE ITEM 11*) 08/24/04
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (*SEE ITEM 13*)

CODE	FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [X] is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(✓)	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (*such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	c. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (*Specify type of modification and authority*)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (*Organized by UCF section headings, including solicitation/contract subject matter where feasible.*)

See Page 2 for Amendment details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (*Type or print*)		16A. NAME AND TITLE OF CONTRACTING OFFICER (*Type or print*)	
		WILLIAM J. WISE	
15B. CONTRACTOR/OFFEROR	15C DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (*Signature of person authorized to sign*)		/S/_____ (*Signature of Contracting Officer*)	17 SEP 2004

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

30-105

STANDARD FORM 30 (REV 10-83)
Prescribed by GSA
FAR (48 CFR) 52.243

AMENDMENTS TO THE SOLICITATION

IFB No. PR-CI-04-10961, covering the Cooling Tower Replacement project at the U.S. EPA AWBERC Facility in Cincinnati, Ohio, is amended as set forth below. Offerors shall acknowledge receipt of this Amendment No. 1 in accordance with the instructions in Block 11 on page 1 hereof. The due date for receipt of proposals remains unchanged.

A. CHANGES TO SOLICITATION/CONTRACT TERMS

1. The SHOP DRAWING SUBMITTAL SCHEDULE included as Attachment 1 to this amendment shall apply to submittals under any resulting contract.

2. The PRELIMINARY COMMISSIONING PLAN is included as Attachment 2 to this amendment (see separate pdf file).

3. Clause F.2, COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, is revised to read as follows:

> The Contractor shall be required to (a) commence work under this contract within ten (10) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than one-hundred-and-thirty-five (135) calendar days after the date the Contractor receives the notice to proceed. The time stated for completion shall include final cleanup of the premises.

4. The following clause is added to Section H of the IFB/Contract Schedule:

H.14 CLEARANCE REQUIREMENTS FOR PROSPECTIVE ON-SITE CONTRACTOR PERSONNEL

(a) Definitions: For purposes of this clause, “on-site” refers to any federally-owned or leased space and any commercial space primarily occupied by federal workers.

(b) Contractor employees working under this contract who will perform work within the AWBERC facility (e.g., in the boiler room area) shall be subject to a background investigation prior to their entry within the facility. The Contractor is responsible for conducting the background investigation and for screening unacceptable candidates from the proposed pool of on-site workers. To be valid for this contract, the background investigation must have been performed within the 30 calendar day period prior to the proposed on-site entry date. The Contractor shall maintain records associated with all background investigations and shall make them available for Government review upon demand, including a completed copy of Standard Form 85P, “Questionnaire for Public Trust Positions”, for each prospective worker within the AWBERC facility.

(c) Each background investigation shall include the following:

(1) Reference checks with prior employers for the preceding five (5) years.

(2) Social Security Number check.

(3) Criminal background check for the counties and states where the individual actually lived and worked during the previous three years.

(4) Civil court check for the counties and states where the individual actually lived and worked during the previous three years.

(5) Motor Vehicle Records check, including driver history and clear license.

(6) Credit check.

(7) Drug testing, consisting of a 5-panel screen for amphetamines, marijuana, cocaine, opiates, and PCP.

(8) Verification that individual meets the education, experience, training, and licensing requirements stipulated in the contract, if applicable.

(9) Verification that the individual has passed all physical examination requirements stipulated in the contract, if applicable.

(d) The Contractor shall submit a written statement to the Project Officer certifying that the background investigation identified in paragraph (c) above has been completed, and that the individual poses no known risk to other persons or to Government facilities or property. The individual shall not enter the Government facility until the Project Officer notifies the Contractor in writing that site access has been granted. When the Government determines that its needs require a quick response, it may elect to grant temporary site access prior to the completion of the Contractor's full background investigation of certain critical employees. In those instances, the Contractor shall submit to the Project Officer a written certification that, based upon its preliminary screening and background review, the Contractor warrants that the proposed employee is eligible for site access. The certification shall state the scope of the preliminary screening and background check and shall state the date for completion of the full background check required by this clause. In no event shall temporary site access be granted on a recurring basis under this contract.

(e) The Contractor's evaluation of an individual's suitability for site access shall consider the following:

(1) Charges of subparagraphs (i) and (ii) below or criminal convictions for the activities in subparagraphs (iii) through (vi) below may be cause for denial of access to any EPA facility:

(i) Intentional false or deceptive statements on the Standard Form 85P or on any other documentation associated with the background investigation.

(ii) Misconduct in prior employment.

(iii) Criminal, dishonest, infamous, or notoriously disgraceful conduct.

(iv) Habitual or excessive use of intoxicating beverages.

(v) Abuse of narcotics, drugs, or other controlled substances.

(vi) Any other statutory disqualification under Title 18 of the U.S. Code.

(2) The Contractor's assessment of prior misconduct by an individual shall include consideration of:

(i) The nature and seriousness of the previous misconduct.

(ii) The circumstances surrounding the previous misconduct.

(iii) The recentness of the previous misconduct.

(iv) The age of the applicant at the time of the previous misconduct.

(f) Whenever the Contractor becomes aware that the retention of an employee for on-site work under this contract poses an unacceptable risk, the Contracting Officer shall be notified immediately, and the employee shall be immediately removed from the site and replaced with a qualified substitute, subject to the background investigation requirements of this clause.

(g) The Contractor shall insert the provisions of this clause in all subcontracts under this contract, and shall require subcontractors to include these terms in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the provisions of this clause.

B. RECORD OF ORGANIZED SITE VISIT CONDUCTED ON 09/13/2004

1. Opening Comments by Bill Wise, Contracting Officer, and John Kappa, On-Site Representative:

a. Bids will be opened at 2:00 PM EDT on Thursday, September 23, 2004. The bid opening location is the Cincinnati Procurement Operations Division, 4411 Montgomery Road, Suite 300, Norwood, Ohio.

b. Facsimile bids are authorized as noted in IFB Provision L.2, "FACSIMILE BIDS". However, the 20% bid guarantee must be submitted in **ORIGINAL** – a fax copy of the bid guarantee is unacceptable.

c. The bid must include prices for the Base Bid Item and Add Alternate #1. These prices shall be entered on page B-1 of the IFB.

d. The IFB Cover Letter identifies documents which are to be included in the bid. Make sure you acknowledge receipt of all IFB amendments.

e. Amendments will be posted on the EPA website at www.epa.gov/oam/cinn_cmd/.

f. Among other changes, Amendment No. 1 will reduce the contract performance period to 135 calendar days after the Contractor receives the notice to proceed. Additionally, Amendment No. 1 will include a shop drawing submittal schedule (see Attachment 1).

g. The preconstruction conference for this project is tentatively scheduled for the week of October 4, 2004.

h. Bids from HUBZone small business concerns will be evaluated in accordance with the provisions of the Section I clause NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (FAR 52.219-4).

i. If the successful bidder is a large business concern, it must submit a subcontracting plan prior to contract award, in accordance with the IFB Provision L.11, SUBCONTRACTING PLAN. This plan will be incorporated into any resulting contract.

j. As directed in the IFB Cover Letter, all questions pertaining to this IFB are to be emailed to the Contracting Officer at wise.william@epa.gov.

k. The schedule for this project will be very tight (i.e., the period of performance is 135 calendar days after receipt of notice to proceed). The project must be completed within this time frame so that the new cooling towers will be ready for next year's cooling season.

l. The successful contractor must perform all work in a safe manner. The existing equipment associated with this project is nearly 30 years old and care must be taken while dismantling it.

m. Much of the outer covering of the cooling towers is covered in transite asbestos panels which must be handled and disposed of properly.

n. Clear and open communications on this project are a must. The EPA On-Site Representative must be informed in advance of when any potential disruption to normal building activities may occur.

2. Questions from Site Visit:

Question 1: Can the Government identify which HUBZone small business concerns will be bidding this project?
Answer: No. The Government will likely not have this information until the actual bids are received. However, companies which have requested hard copies of the specifications and drawings are identified on the Queen City Reprographics website at www.qcrepro.com.

Question 2: Will the commissioning plan be made available to bidders prior to bid opening?
Answer: The Preliminary Commissioning Plan is included as Attachment 2 to this amendment.

Question 3: Who do we contact if additional site visits are needed?
Answer: John Kappa, telephone 513-569-7795, email kappa.john@epa.gov.

Question 4: If potential bidders have questions regarding this project, who should they contact?
Answer: Bill Wise, Contracting Officer, 513-487-2025, email wise.william@epa.gov.

Question 5: How should the successful contractor bring large equipment onto the EPA site during

construction?

Answer: All deliveries shall be made through either the main entrance located on Martin Luther King Drive or from the Nixon Street entrance.

Question 6: Will the successful contractor be required to conduct security checks for personnel who will be working on this project?

Answer: Yes, see Clause H.14, **CLEARANCE REQUIREMENTS FOR PROSPECTIVE ON-SITE CONTRACTOR PERSONNEL,** in paragraph A above.

Question 7: Can the chilled water be discharged into the sewer system once the lines are cut?

Answer: All chilled water needs to be drained by EPA maintenance crew as per their standard procedures. Contractor will need to air blow the coils to remove any remnant chilled water in the coils.

Question 8: Was lead paint used on the pipes located in the cooling tower area?

Answer: Yes. Contractor shall take appropriate precautions consistent with all applicable codes and regulatory requirements.

Question 9: Does the insulation surrounding pipes in the boiler room that are to be removed during this project contain asbestos?

Answer: A sample of suspect pipe insulation was collected and submitted to a laboratory for analysis. The results showed that the sample did not contain asbestos.

Question 10: Will DCT (EPA's Operation & Maintenance Contractor) be cleaning the chiller tubes while construction activities are taking place in the boiler room?

Answer: Yes, DCT will be doing work on the chiller tubes. However, this should not impact the construction activities associated with this project.

Question 11: Can some chilled water lines be moved to bring in the new heat exchanger?

Answer: The chilled water lines referred to in this question are to be removed and rerouted as part of this project.

C. ADDITIONAL POST-SITE-VISIT QUESTIONS AND ANSWERS

Question 1: Is there a BUY AMERICAN ACT requirement associated with this project?

Answer: See IFB Clause I.3, BUY AMERICAN ACT – CONSTRUCTION MATERIALS (FAR 52.225-9), and IFB Clause I.4, NOTICE OF BUY AMERICAN ACT REQUIREMENT – CONSTRUCTION MATERIALS (FAR 52.225-10).

Question 2: Will EPA prepay any expenses to accelerate the delivery of the equipment?

Answer: No.

Question 3: Will EPA pay the Contractor within 30 days of an approved bill? If not, what is the pay period we can expect?

Answer: Payment information is set forth in the Section I By-Reference clause PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (FAR 52.232-27). As noted therein, the due date for making progress payments is 14 days after the designated billing office receives a proper payment request.

Question 4: We have researched the HUBZone requirements and find that the quickest an SBA qualified contractor could be certified is thirty days. As of this email we are not aware of any current planholder that is HUBZone certified. Is the EPA aware of any planholder that is HUBZone certified?

Answer: Companies which have requested hard copies of the specifications and drawings are identified on the Queen City Reprographics website at www.qcrepro.com. To determine whether any of these companies are HUBZone certified, see SBA's "List of Qualified HUBZone Small Business Concerns" at www.sba.gov/hubzone/.

Question 5: In the specs for Hydronic Piping on this project PR-CI-04-10961, I wanted to make sure that the Tower 12" Equalization Line and Tower 3" Drain Lines are in this Hydronic Piping Spec. If so the materials used should be Carbon Steel Materials. A lot of times these two lines use SCH80 PVC Materials. I definitely want to make sure that all bidders are bidding these two lines to the Hydronic Spec of Carbon Steel materials or is it permissible to use SCH80 PVC as other facility's use on such lines.

Answer: All equalization and drain piping, per specification section 15510, needs to be carbon steel.

Question 6: Which rules, Flow Sheets or Plans?

Answer: All control devices are shown on flow diagram, sheet M501. Refer to floor plans, flow diagram and detail sheets for locations of all valves, meters, gauges, fittings and piping specialties, etc.

Question 7: Layout indicates a large number of short radius elbows 90s. Assume long radius elbows are permitted if space allows?

Answer: Use short radius elbows when space available is not sufficient.

Question 8: Section (m301) at pump does not show the basket strainer?

Answer: As shown on Drawings M101 & M501, there needs to be a basket strainer at suction of pump.

Question 9: M-102 at V-1 (near Col H) pressure gages are shown on either side of V-1 but are NOT shown on M-501?

Answer: Per drawing M-102, pressure gauges need to be installed on both sides of M-501.

Question 10: M-102 Shows a 2" takeoff That is shown as a 3" take off on M501. Assume 3" is right and valves should be BFVs not ball valves?? Also near Col H.

Answer: The correct size is 3". Ball valves are okay.

Question 11: Piping to the Plate & Frame is shown with three different valving arrangements. Could the engineer define which he really wants?

Answer: Piping detail for Plate and Frame heat exchanger is shown on drawing M-301.

Question 12: DPS at pumps. Does this control need to be valved

Answer: Yes, it needs to be valved.

Question 13: M10: 20" Future from tower header to future pump appears to go thru a Door ?

Answer: Location of future 20" is okay. Door swing, in future, will need to be restricted to provide access to space under the tower.

Question 14: Engineer uses a lot of expensive Short Radius 90s. Assume contractor may use LR 90S where possible ?
Answer: In general, long radius elbows need to be used. Use short radius elbows wherever space is not sufficient.

Question 15: With only 135 days to complete the project, the requirement for SEISMIC engineering might be better served by using an ALLOWANCE and have Cannon start on this engineering immediately.
Answer: Refer to specification section 15241 for all seismic control requirements.

Question 16: Section 15055 of specs implies only welded piping systems are acceptable , although the engineer has named a Grooved supplier on some of the piping specialties? ALL systems must be welded ?
Answer: All piping systems need to be welded.

Question 17: Assume staff of EPA will drain all systems prior to turnover to the contractor?
Answer: The maintenance crew at EPA will drain all systems prior to turning over to the contractor.

Question 18: M-301: How does the engineer envision that the piping atop and above the cooling towers is supported?
Answer: All piping above the footprint of the tower will be supported from the tower.

Question 19: Spec 01040 appears to be a standard spec that really doesn't apply to this project. Assume that our piping drawings (CADD) are all that would be required?
Answer: This section does apply to the project. CAD drawings are acceptable.

Question 20: Do the motors at the cooling tower pumps contain any PCBs that we might encounter?
Answer: There are no detectable PCBs in the pumps.

Question 21: I am following up on the request to have Mueller added as an acceptable manufacturer for the Plate & Frame Heat Exchanger that is part of this project.
Answer: “Equal” manufacturers other than those listed in specification section 15755 need to comply with the requirements of the contract documents. Selected contractor will need to follow substitution procedures prior to submission of shop drawing. Also, contractor needs to provide documentation of the substituted product to demonstrate such compliance.

Question 22: Given the fact that the CWP-1, 2 or 3 will have to operate during the winter season in connection with the Plate & Frame, doesn't there need to be a somewhat large Electric Unit heater in the Pump Shed?
Answer: Electric heaters are not required in the pump room.

Question 23: M-501 calls out a 16" FUTURE connection for the outlet of the Future Tower whereas the plans show 12". Assume 12" correct? Any chance the engineer might review their plans vs Flow sheets and get them "somewhat" similar?
Answer: The future outlet of the future tower needs to be 12".

Question 24: On the discharge header within the Pump Shed is there a need for a large capacity AIR

VENT? None is shown but specs allude to supplying air vents where necessary?
Answer: Provide air vent at high points in the system per specification section 15510.

Question 25: 15510 - 3.9 A implies that contractor is to supply initial chemical treatment? Assume this is an ERROR and that all chemical treatment will be supplied by EPA's sole source contract?
Answer: Chemical treatment is existing. No new system needs to be installed.

Question 26: Upon the refill of the Chilled water system, who is responsible to bleed the air from upper floors? Is the contractor's responsibility limited to the Main Equipment Room?
Answer: Contractor will be responsible for all such work.

Question 27: Is the operation of the facility 7 am to 5 pm? Can we work on weekends? Will the EPA pick up the cost to work weekends to meet the 135 day schedule? Should the contract just bid straight time?
Answer: Normal facility hours are 7am to 6pm Monday through Friday excluding Federal holidays. Weekend work would ordinarily be reserved for those activities which would disrupt normal facility operations, e.g., tie-ins, utility outages. Bid prices shall include all costs needed to complete the entire project within the contract performance period.

Question 28: Will the EPA prepay any expenses to accelerate the delivery of equipment?
Answer: No.

Question 29: The engineer has laid out the plans based on the selected/named manufacturers and has also listed others as equals. Can we assume that the named equals would be acceptable or should we base our bids only on the listed/laid out equipment? Can we also assume that the listed equipment would be granted IMMEDIATE approval from the engineer?
Answer: Specifications provide a list of acceptable manufacturers. The submittal review process will be on a fast-track schedule.

Question 30: Per 15250 3.3 C.2.a - Outdoor heat traced Condenser pipe insulation finish requires Pittcote coating and Aluminum jacket. Standard practice would require one weatherproof finish. Is it intended that both finishes be applied?
Answer: Provide insulation and finish as per specification section 15250.

Question 31: Will heat tracing be required on Condenser water piping located in new pump room building enclosure?
Answer: Extent of heat tracing of all piping is shown on Drawing M501.

Question 32: Drawing M002 - detail 7 Single Pass Plate and Frame shows a bypass line from CWR to CWS, matter two are shown. Drawings M102 and M501 do not show the bypass, which is correct?
Answer: Piping arrangement at heat exchanger needs to be as per Detail 7/M002.

Question 33: Drawing M102 - 20 in CHWS @ the pumps SCHWP 1, 2, 3, show 14 in connections to the pumps. The connections to these items and various are in questions. Saddles allowed or? Drawings M101 30in CWS and 24in CWS at the bottom of the page have 4, 18in connections. Saddles? Is saddles pipe to pipe permitted on this project?

Answer: Refer to drawings M102; S101 and S102 for locations of pipe support and details.

Question 34: The engineer has called out in several places in his specs for the use of Suction Diffusers at the pump inlets. None of these special fittings are shown on his plans or flow sheets. We assume this may be a generic spec and that there are NO suction diffusers required at any of the new or reworked pumps?
Answer: Use suction diffuser only if space is a problem.

Question 35: The engineer calls out a large balancing valve that could be provided in a Homestead series type Balance Valve in lieu of the meter and BFV arrangement that is implied. Would the engineer allow the use of a true balance valve where required?
Answer: Balancing valves need to be installed wherever required.

Question 36: The engineer specs out piping test plugs but none are shown. Will the engineer accept test plugs and allow the contractor to eliminate thermometers & gages as implied?
Answer: Wherever shown on drawings, thermometers and gages are required.

Question 37: I have completed the take off for the heat trace, from my estimate I come up with a heat trace load of approximately 17.5 KV. Drawing E101 shows a total heat trace load of 8 KW, what should we do?
Answer: The heat trace load requirement is shown on mechanical and electrical drawings.

Question 38: On drawing E101 the Cooling Tower one line diagram shows VFD's for EF-1 and EF2 along with combination starters for each, is this correct? The VFD's do not show up on the Cooling Tower Electrical Plan.
Answer: VFD's are not required for EF-1 and EF-2.

Question 39: On drawings M101 and M501 do we heat trace piping in the new pump building?
Answer: Please refer to drawing M501 for heat tracing requirements on piping exposed to ambient conditions.

Question 40: On drawing M101 is the new 4" domestic CW pipe (note 6) to be heat traced?
Answer: The 4" domestic CW pipe does not need heat tracing. Refer to drawing 501.

Question 41: M-301 Section 2 shows a 1" drain valve on the header at the far end while the flow sheet implies the drain on the back side of V—5. Are there two (2) drains required? Also the size of 1" appears somewhat small?
Answer: Both drains are required.

Question 42: We assume that shields should be used to protect the insulation on the heat traced Condenser water lines?
Answer: Shields need to be installed to protect the insulation.

Question 43: The detail on S-102 does not denote either the insulation or the shield so we assume that the detail is for only the back side of V-5 hangers. Does the engineer have a detail in mind for the 30" insulated CWS? We are not sure that anyone that makes a 36" roller hanger, so we assume that the 30" with a shield would suffice?
Answer: Alternate supports that fit in the available space are acceptable. Please submit a diagram showing proposed hanger for A-E approval.

Question 44: The hangers as detailed on S-102 det #19 appear to be a special fabricated strap versus a standard clevis type Anvil #260? We assume these special hangers are required due to space limitations? If spacing would allow we assume that the standard clevis hanger would be acceptable??

Answer: Alternate supports that fit in the available space are acceptable. Please submit a diagram showing proposed hanger for A-E approval.

Question 45: Does the new heat exchanger require insulation?

Answer: The heat exchanger needs to be insulated.

Question 46: Please define the extent of outdoor heat traced piping for insulation purposes. Drawing M-501 note #1 schematic shows tracing from below grade to tower #5. Is this the extent of piping to be traced?

Answer: The extent of heat tracing is shown on drawing M501.

Question 47: The detail #7 of the Plate & Frame on M002 appears to show a bypass in the CWR line. This bypass is not shown on the M501 Flow sheet? Is the bypass required on this project?

Answer: The piping at heat exchanger needs to be as per detail 7 on Sheet M002.

Question 48: The 12" equalizer line appears to lack any future connection for the FUTURE tower. This is the only line that does not accommodate the possibility of the FUTURE tower. At tower # 5, in lieu of an elbow, the engineer may wish to install a tee with a blind flange and or a BFV?

Answer: The future equalizer can be connected in future by closing valve V-4.

Question 49: Note 7on md101,it appears the mud valves will be removed, therefore there is no need for repair, is this correct?

Answer: The floor will need to be repaired by the Contractor after the mud valve is removed.

Question 50: In section 02300 there is a reference to oil contaminated soils, are there any and to what extent?

Answer: There is no oil-contaminated soil in this project.

Question 51: Pump schedule calls for inertia bases for pumps chwp-1, 2 & 3. Note 15 on m102 calls for replacing the vibration isolators only. Is it right to assume that existing inertia bases for above mentioned pumps will be reused?

Answer: Existing inertia bases for CHWP-1, 2, & 3 will be reused and vibration isolators need to be replaced.

Question 52: The engineer has laid out piping arrangements that are not factory made fittings. Are we to assume that we are allowed to fabricate these unusual fittings from standard pipe?
Examples : 30" x 20" cross
12" x 8" true wye
18" fishmouth shaped true wye onto either 24" or 30"
These examples along with others can be MADE but are not standard fittings! Do we assume that we MAKE these fittings or do we use standard fittings and alter the engineer's layout?

Answer: All fittings need to per specifications. Piping layout shop drawing needs to be submitted

for A/E review prior to fabrication.

Question 53: Per our conversation I would like to request that Yaskawa be added as an acceptable manufacturer to the specification for Variable Frequency Drives. We have handled the Yaskawa line for abut 4 years now and are typically one of their leading representatives every year. We support Yaskawa with both start-up and service out of our office. It is an excellent product that has been on the market for years and was formerly sold under the Magnetek brand name. Attached is a general brochure on their E7 Series which has been designed specifically for the HVAC industry.

Answer: "Equal" manufacturers other than those listed in specification section 15755 need to comply with the requirements of the contract documents. Selected contractor will need to follow substitution procedures prior to submission of shop drawings. Also, contractor needs to provide documentation of the substituted product to demonstrate such compliance.

Question 54: What involvement will Cannon Design (the A&E Firm) have on this project once it has been awarded?

Answer: Cannon Design, in conjunction with EPA Cincinnati, will perform the construction administration work on this project.

Question 55: Are the inertia bases for the pumps to be replaced?

Answer: Refer to floor plans for all related work. Existing inertia bases for CHWP-1, 2, & 3 need to remain and vibration isolators need to be replaced.

Question 56: The Cooling Tower Isolation Valves are shown as analog outputs on drawings M-501. Are these intended to be Digital Outputs for on-off control? Please provide a specification for these valves and actuators.

Answer: Controls valves are specified in Section 15970. All input and output points are shown on dwg. M501.

Question 57: Drawing M-501 indicates that cooling tower high and low level alarms are analog inputs. Specification section 15711 indicates these are digital inputs. Are they to be digital or analog? Is there to be a level sensor for each cooling tower or just the two shown on drawing M-501?

Answer: All digital/analog inputs and output points need to be as per drawing M501. Only 2 towers, as per dwg M501, need water level sensors.

Question 58: Drawing M-501 shows an analog output going to the domestic make-up water meter. Is this intended to be an analog input for make-up water flow monitoring?

Answer: That is correct.

Question 59: The sequence of operation indicates that condenser water pumps are to be controlled for flow based upon the number and combination of chillers on-line. Is this to be accomplished via water balance, or will their be an additional flow meter required? Drawing M-501 does not detail a flow meter for total condenser water flow.

Answer: There is an existing flow meter, as shown on M501, for each chiller, to measure condenser water flow rate.

Question 60: Drawing M-501 shows Flow Switches, Differential Pressure Switches, and current

sensing relays for pump status. Can current sensors only an acceptable method for pump status in lieu of three separate devices

Answer: Pump status needs to be ascertained as per drawing M501.

Question 61: What is the pipe size for the domestic water valve shown on drawing M-102?

Answer: Refer to drawing note 1 for pipe size.

Question 62: Drawing M-501 shows and analog input for the package immersion heater failure alarm. Should this device be a digital input?

Answer: Contractor shall demonstrate, during submittal stage, the reason for this point to be a digital input.

– End of Amendment No. 1 –

Attachments:
(1) Shop Drawing Submittal Schedule - 1 page (separate pdf file)
(2) Preliminary Commissioning Plan - 23 pages (separate pdf file)
(3) Attendance Sheet for 9/13/2004 Organized Site Visit - 1 page (separate pdf file)